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(a) graded response for tooth motility, gingival index, continuity

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of epithelium and transseptal fibers were noted in group I (Control), Group II (Periodontal rats) and Group III (Treated rats) after 2 weeks. **p < 0.01 and ***p < 0.001 compared to group I (Control), ns - non-significant as compared to control by two-way ANOVA followed by Bonferroni post-tests. Vertical bars represents SEM, n = 6. (b, c, d and e) Microscopic observations of differentiation of gingival connective tissue (gct), dentine (dt), predentine (pd), pulp (pl) and alveolar bone (ab) of rats after LIP (10 X). (b) Group I; (c) Group II; Group III (d) After 1 week of treatment; and (e) after 2 weeks of treatment. (f and g) High magnification images (40 X), (f) showing damaged 'gct' and inflammatory response in periodontal rats. Monocyte (mc) infiltration (red arrow) and damaged periodontal ligaments (lg) (blue arrow) in the 'gct' as a result of ligature placement, the cells were stained blue containing condensed nuclei and little cytoplasm. Also, some motile, large and multinucleate osteoclasts 'oc' cells (yellow arrow) can be observed near bone resorption area viz. alveolar bone (ab), and (g) regenerated ligaments (lg) after 2 weeks of treatment period.

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